UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/922,913	08/07/2001	Shinji Nishikawa	3007/50290	9051

23911 7590 11/16/2004

CROWELL & MORING LLP
INTELLECTUAL PROPERTY GROUP
P.O. BOX 14300
WASHINGTON, DC 20044-4300

EXAMINER	
SHAFER, RICKY D	
ART UNIT	**PAPER NUMBER**
2872	

DATE MAILED: 11/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/922,913	NISHIKAWA ET AL.	
	Examiner	Art Unit	
	Ricky D. Shafer	2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 October 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *4 and 5* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *4 and 5* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/21/2004 has been entered.

2. Applicant's arguments filed October 21, 2004 have been fully considered but they are not persuasive.

In response to applicant's argument that the reference fails to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a head-up display system which prevents double imaging formation and a head-up display system having no intervening structure between the first λ/4 film, the second λ/4 film and the liquid crystal display) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Moreover, applicant's use of the transitional phase "comprising" does not exclude the presence of additional, unrecited elements or function. See Moleculon Research Corp v. CBS, Inc., 793 F.2d 1261, 229 USPQ 805 (Fed, Cir. 1986); In re Baxter, 656 F.2d 679, 686, 210 USPQ 795, 803 (CCPA 1981); and Ex parte Davis, 80 USPQ 448, 450 (Bd. App. 1948).

In response to applicant's argument that there is no suggestion to modify the reference, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching,

suggestion, or motivation to do so found either in the reference(s) themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the general knowledge of forming in one piece an article/device which has formerly been formed in two or more pieces and put together has been already well established, as set out in Patent Law. Note: Howard v. Detroit Stove Works, 150 U.S. 164 (1893).

With respect to applicant's argument that the device of McDonald cannot be modified to retain its original operation is unsupported by any factual evidence to support applicant's conclusion.

Accordingly, applicant arguments are not persuasive and the rejection is maintained.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDonald ('108).

McDonald discloses a head-up display system comprising a transparent plate (one of the layers of a standard safety windshield, recited at column 4, lines 19-23), a liquid crystal display (111) for generating a display light of information and inherently includes a display panel and first and second quarter-wave films (113, 121), wherein said display light is changed from one polarization to another polarization (see column 3, lines 51-56) and incident on said transparent

plate, note Fig. 3 along with the associated description thereof, except for explicitly stating that the first and second quarter-wave films form a laminate and configured on a display panel of said liquid crystal display.

It is well known to bond a plurality of optical elements together in the same field of endeavor for the purpose of obtaining an unitary optical device.

Therefore, it would have been obvious and/or within the level of one of ordinary skill in the art at the time the invention was made to modify the elements (the first and second quarter-wave films and the display panel of the liquid crystal display) of McDonald to include a typical adhesive commonly used and employed in the optical art in order to obtain a compact optical device, since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. Note Howard v. Detroit stove Works, 150 U.S. 164 (1893).

As to the intended use limitations of the polarization directions, McDonald clearly possesses the orientation specified by applicant due the fact that the display light is changed from one polarization to another polarization [i.e., the polarization direction of the display light is inclined/orientated at a first angle of 90 degrees with respect to a horizontal axis of the display panel due to the fact that the display light is "vertically polarized", the first quarter-wave film is disposed such that a fast axis of said first quarter-wave film has an inclination/orientation at a second angle of "45 degrees" relative to the horizontal axis of the first quarter-wave film so as to produce circularly polarized light and the second quarter-wave film is disposed such that the fast axis of the second quarter-wave film has an inclination/orientation at a third angle of "plus or minus 45 degrees or plus and minus 135 degrees" relative to the horizontal axis of the second

quarter-wave film due to the fact that the second quarter-wave film includes a net 90 degrees orientation relative to the first quarter-wave film so as to convert said circularly polarized light back into linearly polarized light. (See column 2, lines 18 to 34, column 2, lines 52 to 59, column 3, lines 38 to 61 and figures 1 and 2)]

5. Yamanaka ('756), Hoppe ('023) and Roest ('332) each teach it is well known bond to a plurality of optical elements together in order to obtain a compact, unitary optical device.

6. All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ricky D. Shafer whose telephone number is (571) 272-2320. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RDS

November 14, 2004

RICKY D. SHAFER
PRIMARY EXAMINER
ART UNIT 2872